

Johannsen



1600

SEARCHED

P.6

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/636,259C

DATE: 03/07/2003
TIME: 08:08:38

Input Set : A:\10738-44.ST25.txt
Output Set: N:\CRF4\03072003\I636259C.raw

3 <110> APPLICANT: Small, Kersten
4 Liggett, Stephen
6 <120> TITLE OF INVENTION: Alpha-2A-Adrenergic Receptor Polymorphisms
8 <130> FILE REFERENCE: 10738-44
10 <140> CURRENT APPLICATION NUMBER: 09/636,259C
11 <141> CURRENT FILING DATE: 2000-08-10
13 <160> NUMBER OF SEQ ID NOS: 26
15 <170> SOFTWARE: PatentIn version 3.1
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 1350
19 <212> TYPE: DNA
20 <213> ORGANISM: Homo sapiens
22 <400> SEQUENCE: 1
23 atgggctccc tgcagccgga cgcgggcaac gcgagctgga acgggaccga ggcgccgggg 60
25 ggcggcgccc gggccacccc ttactccctg caggtgacgc tgacgctgggt gtgcctggcc 120
27 ggcctgctca tgctgctcac cgtgttcggc aacgtgctcg tcatcatcgc cgtgttcacg 180
29 agccgcgcgc tcaaggcgcc ccaaaacctc ttccctgggtt ctctggcctc ggcgcacatc 240
31 ctggtgccca cgctcgcat cccttctcg ctggccaaacg aggtcatggg ctactggtac 300
33 ttcggcaagg ctgggtgcga gatctacctg gcgctcgacg tgcttctcg cacgtcgcc 360
35 atcgtgcacc tggcgccat cagcctggac cgctactggt ccatcacaca ggcgcacatc 420
37 tacaacacctga agcgcacgcg ggcgcgcac aaggccatca tcatcacatggttcatc 480
39 tcggccgtca tctccccc ggcgcgtcatc tccatcgaga agaaggccgg cggccggcc 540
41 cccgcagccgg ccgagccgcg ctgcgagatc aacgaccaga agtggtaatgttcatc 600
43 tgcacatcggtc cttcttcgc tccctgcctc atcatgatcc tggctcaatgttcatc 660
45 cagatcgcca agcgtcgac ccgcgtgcca cccagccgcg ggggtccggga cgcgcgtcgcc 720
47 ggcgcgcgcg ggggcacccg ggcgcaggccc aacggtctgg gcccccgcgcg cagcgcgggc 780
49 cccggggggcgcg cagagccgcg accgctgccc acccagctca acggcgcgcgc tggcgagccc 840
51 ggcgcggccg ggcgcgcgcg caccgacgcg ctggacctgg aggagagctc gtctccgac 900
53 cacgcccgcgc ggcctccagg gccccgcaga cccgagcgcg gtcccccgggg caaaggcaag 960
55 gcccgcgcgc gccaggtgaa gccggggcgcac agcctgcgcg ggcgcggggcc gggggcgcacg 1020
57 gggatcgggc cgcgcgtgc agggccgggg gaggagcgcg tcggggctgc caaggcgtcg 1080
59 cgctggcgcgc ggcgcgcgcgaa ccgcgcgcgcgaa agcgttgcgttgcg tggctactgc 1140
61 ggagtgtcg tgggtgtctg gttcccttc ttcttcacatc acacgctcac ggcgcgtcg 1200
63 tgctccgtgc cacgcacgc tttcaatc ttcttcgttgc tggctactgc caacagctcg 1260
65 ttgaacccggg tcatctacac catctcaac cacgattcc ggcgcgcctt caagaagatc 1320
67 ctctgtcgcc gggacagggaa gcggatcg 1350
70 <210> SEQ ID NO: 2
71 <211> LENGTH: 1350
72 <212> TYPE: DNA
73 <213> ORGANISM: Homo sapiens
75 <400> SEQUENCE: 2
76 atgggctccc tgcagccgga cgcgggcaac gcgagctgga acgggaccga ggcgccgggg 60
78 ggcggcgccc gggccacccc ttactccctg caggtgacgc tgacgctgggt gtgcctggcc 120

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/636,259C

DATE: 03/07/2003
TIME: 08:08:38

Input Set : A:\10738-44.ST25.txt
Output Set: N:\CRF4\03072003\I636259C.raw

80	ggcctgctca	tgctgctcac	cgtgttcggc	aacgtgctcg	tcatcatcg	cgtgttcacg	180
82	agccgcgcgc	tcaaggcgcc	ccaaaacctc	ttcctgggt	ctctggc	ggccgacatc	240
84	ctggcgcca	cgctcgcat	cccttctcg	ctggccaacg	aggcatggg	ctactggtac	300
86	ttcggcaagg	cttggtgcg	gatctacctg	gcgctcgacg	tgctcttctg	cacgtcg	360
88	atcgtgcacc	tgtgcgccc	cagcctggac	cgctactgg	ccatcacaca	ggccatcgag	420
90	tacaacctga	agcgcacg	gcgcgc	aaggccatca	tcatcaccc	gtgggtcatc	480
92	tcggccgtca	tctccttccc	gcccgtc	tccatcgaga	agaaggcg	cgccggcg	540
94	ccgcagccgg	ccgagccgc	ctgcgagatc	aacgaccaga	agtggta	catctcg	600
96	tgcacatcg	ccttcttgc	tccctgc	atcatgatcc	tggta	gcgcacatc	660
98	cagatcgcca	agcgtcgac	ccgcgtg	cccagccg	gggg	cgccgtcg	720
100	gcccgc	ggggcaccga	gcccgc	aagggtctgg	gccccgag	cagcgcgg	780
102	ccggggggcg	cagaggccga	accgc	accagctca	acggc	ttggcag	840
104	gcccggccg	ggccgcgc	caccg	gacgc	ctggac	aggagag	900
106	cacgcgc	ggcctcc	agg	gcccgc	gtccccgg	caaaggca	960
108	gcccgc	gcccagg	gcccgc	agcctgc	ggcgcgg	ggggcgac	1020
110	gggatcg	cgccggct	agggc	ggggcg	tcggggct	caaggcg	1080
112	cgctggcg	ggcggc	aggaa	ccgcgaga	cgctcac	tgcgtcg	1140
114	ggagtgtt	ttgtgtcg	gttccc	ttcttct	ttcttct	acacgctc	1200
116	tgctccgt	cacgcac	gttcaaatt	ttcttct	tcggctact	caacagct	1260
118	ttgaacc	tcatctac	catcttca	cacgattt	gcccgc	caagaagat	1320
120	ctctgtcg	gggacagg	gcccgt	gcccgt	gcccgt	gcccgt	1350

123 <210> SEQ ID NO: 3
124 <211> LENGTH: 450
125 <212> TYPE: PRT

126 <213> ORGANISM: Homo sapiens

128 <400> SEQUENCE: 3

130	Met	Gly	Ser	Leu	Gln	Pro	Asp	Ala	Gly	Asn	Ala	Ser	Trp	Asn	Gly	Thr	
131	1			5				10				15					
134	Glu	Ala	Pro	Gly	Gly	Gly	Ala	Arg	Ala	Thr	Pro	Tyr	Ser	Leu	Gln	Val	
135				20				25				30					
138	Thr	Leu	Thr	Leu	Val	Cys	Leu	Ala	Gly	Leu	Leu	Met	Leu	Leu	Thr	Val	
139				35				40				45					
142	Phe	Gly	Asn	Val	Leu	Val	Ile	Ile	Ala	Val	Phe	Thr	Ser	Arg	Ala	Leu	
143				50				55			60						
146	Lys	Ala	Pro	Gln	Asn	Leu	Phe	Leu	Val	Ser	Leu	Ala	Ser	Ala	Asp	Ile	
147		65				70			75			80					
150	Leu	Val	Ala	Thr	Leu	Val	Ile	Pro	Phe	Ser	Leu	Ala	Asn	Glu	Val	Met	
151						85			90			95					
154	Gly	Tyr	Trp	Tyr	Phe	Gly	Lys	Ala	Trp	Cys	Glu	Ile	Tyr	Leu	Ala	Leu	
155						100			105			110					
158	Asp	Val	Leu	Phe	Cys	Thr	Ser	Ser	Ile	Val	His	Leu	Cys	Ala	Ile	Ser	
159						115			120			125					
162	Leu	Asp	Arg	Tyr	Trp	Ser	Ile	Thr	Gln	Ala	Ile	Glu	Tyr	Asn	Leu	Lys	
163		130				135			140								
166	Arg	Thr	Pro	Arg	Arg	Ile	Lys	Ala	Ile	Ile	Thr	Val	Trp	Val	Ile		
167	145				150				155			160					
170	Ser	Ala	Val	Ile	Ser	Phe	Pro	Pro	Leu	Ile	Ser	Ile	Glu	Lys	Lys	Gly	
171						165			170			175					
174	Gly	Gly	Gly	Pro	Gln	Pro	Ala	Glu	Pro	Arg	Cys	Glu	Ile	Asn	Asp		

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/636,259C

DATE: 03/07/2003
TIME: 08:08:38

Input Set : A:\10738-44.ST25.txt
Output Set: N:\CRF4\03072003\I636259C.raw

175	180	185	190
178 Gln	Lys Trp	Tyr Val Ile Ser Ser Cys Ile Gly Ser Phe	Phe Ala Pro
179	195	200	205
182 Cys	Leu Ile Met Ile Leu Val Tyr Val Arg Ile	Tyr Gln Ile Ala Lys	
183	210	215	220
186 Arg	Arg Thr Arg Val Pro Pro Ser Arg Arg Gly	Pro Asp Ala Val Ala	
187 225	230	235	240
190 Ala	Pro Pro Gly Gly Thr Glu Arg Arg Pro Asn Gly	Leu Gly Pro Glu	
191	245	250	255
194 Arg	Ser Ala Gly Pro Gly Gly Ala Glu Ala Glu Pro	Leu Pro Thr Gln	
195	260	265	270
198 Leu	Asn Gly Ala Pro Gly Glu Pro Ala Pro Ala Gly	Pro Arg Asp Thr	
199	275	280	285
202 Asp	Ala Leu Asp Leu Glu Glu Ser Ser Ser Asp	His Ala Glu Arg	
203	290	295	300
206 Pro	Pro Pro Gly Pro Arg Arg Pro Glu Arg Gly	Pro Arg Gly Lys Gly	Lys
207 305	310	315	320
210 Ala	Arg Ala Ser Gln Val Lys Pro Gly Asp Ser	Leu Pro Arg Arg Gly	
211	325	330	335
214 Pro	Gly Ala Thr Gly Ile Gly Thr Pro Ala Ala Gly	Pro Gly Glu Glu	
215	340	345	350
218 Arg	Val Gly Ala Ala Lys Ala Ser Arg Trp Arg Gly	Arg Gln Asn Arg	
219	355	360	365
222 Glu	Lys Arg Phe Thr Phe Val Leu Ala Val Val Ile	Gly Val Phe Val	
223	370	375	380
226 Val	Cys Trp Phe Pro Phe Phe Thr Tyr Thr Leu	Thr Ala Val Gly	
227 385	390	395	400
230 Cys	Ser Val Pro Arg Thr Leu Phe Lys Phe Phe	Trp Phe Gly Tyr	
231	405	410	415
234 Cys	Asn Ser Ser Leu Asn Pro Val Ile Tyr Thr Ile	Phe Asn His Asp	
235	420	425	430
238 Phe	Arg Arg Ala Phe Lys Lys Ile Leu Cys Arg Gly	Asp Arg Lys Arg	
239	435	440	445
242 Ile	Val		
243	450		
246 <210>	SEQ ID NO: 4		
247 <211>	LENGTH: 450		
248 <212>	TYPE: PRT		
249 <213>	ORGANISM: Homo sapiens		
251 <400>	SEQUENCE: 4		
253 Met	Gly Ser Leu Gln Pro Asp Ala Gly Asn Ala Ser	Trp Asn Gly Thr	
254 1	5	10	15
257 Glu	Ala Pro Gly Gly Ala Arg Ala Thr Pro Tyr Ser	Leu Gln Val	
258	20	25	30
261 Thr	Leu Thr Leu Val Cys Leu Ala Gly Leu Leu Met	Leu Leu Thr Val	
262	35	40	45
265 Phe	Gly Asn Val Leu Val Ile Ile Ala Val Phe	Thr Ser Arg Ala Leu	
266	50	55	60
269 Lys	Ala Pro Gln Asn Leu Phe Leu Val Ser	Leu Ala Ser Ala Asp Ile	

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/636,259C

DATE: 03/07/2003
TIME: 08:08:38

Input Set : A:\10738-44.ST25.txt
Output Set: N:\CRF4\03072003\I636259C.raw

270	65	70	75	80												
273	Leu	Val	Ala	Thr	Leu	Val	Ile	Pro	Phe	Ser	Leu	Ala	Asn	Glu	Val	Met
274																95
277	Gly	Tyr	Trp	Tyr	Phe	Gly	Lys	Ala	Trp	Cys	Glu	Ile	Tyr	Leu	Ala	Leu
278															110	
281	Asp	Val	Leu	Phe	Cys	Thr	Ser	Ser	Ile	Val	His	Leu	Cys	Ala	Ile	Ser
282															125	
285	Leu	Asp	Arg	Tyr	Trp	Ser	Ile	Thr	Gln	Ala	Ile	Glu	Tyr	Asn	Leu	Lys
286															140	
289	Arg	Thr	Pro	Arg	Arg	Ile	Lys	Ala	Ile	Ile	Ile	Thr	Val	Trp	Val	Ile
290															160	
293	Ser	Ala	Val	Ile	Ser	Phe	Pro	Pro	Leu	Ile	Ser	Ile	Glu	Lys	Lys	Gly
294															175	
297	Gly	Gly	Gly	Pro	Gln	Pro	Ala	Glu	Pro	Arg	Cys	Glu	Ile	Asn	Asp	
298															190	
301	Gln	Lys	Trp	Tyr	Val	Ile	Ser	Ser	Cys	Ile	Gly	Ser	Phe	Phe	Ala	Pro
302															205	
305	Cys	Leu	Ile	Met	Ile	Leu	Val	Tyr	Val	Arg	Ile	Tyr	Gln	Ile	Ala	Lys
306															220	
309	Arg	Arg	Thr	Arg	Val	Pro	Pro	Ser	Arg	Arg	Gly	Pro	Asp	Ala	Val	Ala
310															240	
313	Ala	Pro	Pro	Gly	Gly	Thr	Glu	Arg	Arg	Pro	Lys	Gly	Leu	Gly	Pro	Glu
314															255	
317	Arg	Ser	Ala	Gly	Pro	Gly	Gly	Ala	Glu	Ala	Glu	Pro	Leu	Pro	Thr	Gln
318															270	
321	Leu	Asn	Gly	Ala	Pro	Gly	Glu	Pro	Ala	Pro	Ala	Gly	Pro	Arg	Asp	Thr
322															285	
325	Asp	Ala	Leu	Asp	Leu	Glu	Glu	Ser	Ser	Ser	Ser	Asp	His	Ala	Glu	Arg
326															300	
329	Pro	Pro	Gly	Pro	Arg	Arg	Pro	Glu	Arg	Gly	Pro	Arg	Gly	Lys	Gly	Lys
330															320	
333	Ala	Arg	Ala	Ser	Gln	Val	Lys	Pro	Gly	Asp	Ser	Leu	Pro	Arg	Arg	Gly
334															335	
337	Pro	Gly	Ala	Thr	Gly	Ile	Gly	Thr	Pro	Ala	Ala	Gly	Pro	Gly	Glu	Glu
338															350	
341	Arg	Val	Gly	Ala	Ala	Lys	Ala	Ser	Arg	Trp	Arg	Gly	Arg	Gln	Asn	Arg
342															365	
345	Glu	Lys	Arg	Phe	Thr	Phe	Val	Leu	Ala	Val	Val	Ile	Gly	Val	Phe	Val
346															380	
349	Val	Cys	Trp	Phe	Pro	Phe	Phe	Thr	Tyr	Thr	Leu	Thr	Ala	Val	Gly	
350															400	
353	Cys	Ser	Val	Pro	Arg	Thr	Leu	Phe	Lys	Phe	Phe	Phe	Trp	Phe	Gly	Tyr
354															415	
357	Cys	Asn	Ser	Ser	Leu	Asn	Pro	Val	Ile	Tyr	Thr	Ile	Phe	Asn	His	Asp
358															430	
361	Phe	Arg	Arg	Ala	Phe	Lys	Lys	Ile	Leu	Cys	Arg	Gly	Asp	Arg	Lys	Arg
362															445	
365	Ile	Val														
366		450														

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/636,259C

DATE: 03/07/2003
TIME: 08:08:38

Input Set : A:\10738-44.ST25.txt
Output Set: N:\CRF4\03072003\I636259C.raw

369 <210> SEQ ID NO: 5
370 <211> LENGTH: 22
371 <212> TYPE: DNA
372 <213> ORGANISM: Homo sapiens
374 <400> SEQUENCE: 5
375 tttacccatc ggctctccct ac 22
378 <210> SEQ ID NO: 6
379 <211> LENGTH: 23
380 <212> TYPE: DNA
381 <213> ORGANISM: Homo sapiens
383 <400> SEQUENCE: 6
384 gagacaccag gaagagggtt tgg 23
387 <210> SEQ ID NO: 7
388 <211> LENGTH: 20
389 <212> TYPE: DNA
390 <213> ORGANISM: Homo sapiens
392 <400> SEQUENCE: 7
393 tcgtcatcat cgccgtgttc 20
396 <210> SEQ ID NO: 8
397 <211> LENGTH: 23
398 <212> TYPE: DNA
399 <213> ORGANISM: Homo sapiens
401 <400> SEQUENCE: 8
402 cgtaccacctt ctggtcgttg atc 23
405 <210> SEQ ID NO: 9
406 <211> LENGTH: 24
407 <212> TYPE: DNA
408 <213> ORGANISM: Homo sapiens
410 <400> SEQUENCE: 9
411 gccatcatca tcaccgtgtg ggtc 24
414 <210> SEQ ID NO: 10
415 <211> LENGTH: 23
416 <212> TYPE: DNA
417 <213> ORGANISM: Homo sapiens
419 <400> SEQUENCE: 10
420 ggctcgctcg ggccttgccct ttg 23
423 <210> SEQ ID NO: 11
424 <211> LENGTH: 22
425 <212> TYPE: DNA
426 <213> ORGANISM: Homo sapiens
428 <400> SEQUENCE: 11
429 gacctggagg agagctcgac tt 22
432 <210> SEQ ID NO: 12
433 <211> LENGTH: 23
434 <212> TYPE: DNA
435 <213> ORGANISM: Homo sapiens
437 <400> SEQUENCE: 12
438 tgaccgggtt caacgagactg ttg 23
441 <210> SEQ ID NO: 13

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/636,259C

DATE: 03/07/2003
TIME: 08:08:39

Input Set : A:\10738-44.ST25.txt
Output Set: N:\CRF4\03072003\I636259C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:19; N Pos. 7

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/636,259C

DATE: 03/07/2003
TIME: 08:08:39

Input Set : A:\10738-44.ST25.txt
Output Set: N:\CRF4\03072003\I636259C.raw

L:507 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0